

CLAIM AMENDMENTS

Claim 1 (currently amended): In a wireless telecommunication system, a method for providing service features for wireless calls without use of a VLR (Visitor Location Register), comprising the steps of:

in response to a call to or from a wireless terminal situated in a host wireless communication network accessing a packet data network from a wireless telecommunication network by issuing a feature service request from said host wireless communication network into said public packet data network for administering service features for asaid wireless call to or from asaid wireless terminal; and

accessing a home network regardless of the location of said wireless terminal, for managing all service features in a central location by delivering said feature service request to a feature server located in said home network, said home network that is being part of or reachable through connected to said packet data network;

said feature service request comprising a query of wireless subscriber service features provisioned on behalf of said wireless terminal and stored by said feature server; and

returning a feature service response to said host wireless communication network and processing service feature information in said response without VLR storage thereof.

Claim 2 (currently amended): A method in accordance with Claim 1 wherein said data home network is the Interneta home network associated with said wireless terminal.

Claim 3 (canceled).

Claim 4 (currently amended): A method in accordance with Claim 1 wherein said method home network accessing step further includes said feature server consulting a home location register database in said a home wireless communication network of said wireless terminal.

Claim 5 (currently amended): A method in accordance with Claim 1 wherein said method home network accessing step further includes said feature server passing service feature control to a packet data feature server that is local to said host wireless communication network to said wireless terminal.

Claims 6-7 (cancelled).

Claims 8 (original): A method in accordance with Claim 1 wherein said wireless call is a voice call.

Claim 9 (original): A method in accordance with Claim 1 wherein said wireless call is a data call.

Claim 10 (original): A method in accordance with Claim 1 wherein said home network is a wireless network.

Claim 11 (original): A method in accordance with Claim 1 wherein said home network is a wireless voice network.

Claim 12 (currently amended): In a wireless telecommunication system, a system for providing service features for wireless calls without use of a VLR (Visitor Location Register), comprising:

a switch adapted to access a public packet data network in response to a call to or from a wireless terminal situated in from a host wireless telecommunication network by issuing a feature service request into said packet data network for administering service features for asaid wireless call to or from asaid wireless terminal; and

a packet data feature server located in a home network that is part of or reachable through said packet data network and adapted to process said service feature request and manage service features for said wireless terminal; regardless of the location of said wireless terminal, said home network being connected to said packet data network

said feature service request comprising a query of wireless subscriber service features provisioned on behalf of said wireless terminal and stored by said feature server; and

said feature server being further adapted to return a feature service response to said host wireless communication network and said switch being further adapted to process service feature information in said response without VLR storage thereof.

Claim 13 (currently amended): A system in accordance with Claim 12 wherein said datahome network is the Internet a home network associated with said wireless terminal.

Claim 14 (original): A system in accordance with Claim 12 wherein said home network is a home network associated with wireless terminals of plural wireless networks.

Claim 15 (currently amended): A system in accordance with Claim 14 wherein said feature server is further adapted to consult a home location register database in ~~said~~ a home wireless communication network of said wireless terminal.

Claim 16 (original): A system in accordance with Claim 14 wherein said feature server is further adapted to pass service feature control to a packet data feature server that is local to said host wireless communication network ~~terminal~~.

Claims 17-18 (cancelled).

Claim 19 (original): A system in accordance with Claim 12 wherein said wireless call is a voice call.

Claim 20 (original): A system in accordance with Claim 12 wherein said wireless call is a data call.

Claim 21 (original): A system in accordance with Claim 12 wherein said home network is a wireless network.

Claim 22 (original): A system in accordance with Claim 17 wherein said local network is a wireless voice or data network.

Claim 23 (currently amended): A method for providing service features for wireless calls in a wireless telecommunication system without use of a VLR (Visitor Location Register), comprising the steps of:

in response to a call to or from a wireless terminal in a host~~local~~ wireless telecommunication network connected to a public packet data network, sending a service feature request from said host wireless telecommunication network across said packet data network to a packet data feature server adapted to administer service features for said wireless terminal; and

said feature service request comprising a query of wireless subscriber service features provisioned on behalf of said wireless terminal and stored by said feature server;

returning a service feature response to said ~~local~~host wireless communication network;
and

processing service feature information in said response without VLR storage thereof.

Claim 24 (original): A method in accordance with Claim 23 wherein said feature server is located in a home network connected to said data network and is adapted to serve mobile subscribers in a single wireless network.

Claim 25 (original): A method in accordance with Claim 23 wherein said feature server is located in a home network connected to said data network and is adapted to serve mobile subscribers in multiple wireless networks.

Claim 26 (currently amended): In a data network feature server, a method for providing service features for wireless calls without use of a VLR (Visitor Location Register), comprising the steps of:

storing wireless subscriber service feature logic provisioned for a plurality of wireless terminals;

communicating service feature messages via a public data network with a switch located in a wireless network in response to a service feature request sent by said switch over said data network, said switch being in communication with a wireless terminal whose service feature logic is maintained by said feature server; and

communicating, as necessary, service feature messages via a data network with said wireless terminal without VLR storage thereof.

Claim 27 (original): A method in accordance with Claim 26 further including steps of determining whether additional service feature information is required for said wireless terminal, and obtaining such information from a service feature information resource that is in communication with said feature server.

Claim 28 (original): A method in accordance with Claim 26 further including steps of determining whether local feature service is required for said wireless terminal, and if so, passing service feature control to a local feature server associated with said wireless network.

Claim 29 (currently amended): A data network feature server for providing service features for wireless calls without use of a VLR (Visitor Location Register), comprising:

stored wireless subscriber service feature logic provisioned for a plurality of wireless terminals;

means for communicating service feature messages via a public data network with a switch located in a wireless network in response to a service feature request sent by said switch

over said data network, said switch being in communication with a wireless terminal whose service feature logic is maintained by said feature server; and

means for communicating service feature messages via a data network with said wireless terminal without VLR storage thereof.

Claim 30 (original): A data network feature server in accordance with Claim 29 further including control programming adapted to determine whether additional service feature information is required for said wireless terminal, and to obtain such information from a service feature information resource that is in communication with said feature server.

Claim 31 (original): A data network feature server in accordance with Claim 29 further including control programming adapted to determine whether local feature service is required for said wireless terminal, and if so, to pass service feature control to a local feature server associated with said wireless network.

Claim 32 (currently amended): In a wireless network switch in a wireless network, a method for providing service features for wireless calls without use of a VLR (Visitor Location Register), comprising the steps of:

establishing a connection to a public data network;

establishing a connection to a wireless terminal;

in response to a call to or from said wireless terminal, sending a service feature request via said data network to a feature server located in a home network that is connected to or part of said data network; and

said service feature request comprising a query of wireless subscriber service features provisioned on behalf of said wireless terminal and stored by said feature server; and

responding to service feature messages sent from said feature server without VLR storage thereof.

Claim 33 (original): A method in accordance with claim 32 further including a step of assisting, as necessary, in the routing of service feature messages between said wireless terminal and said feature server via said data network.

Claim 34 (currently amended): A wireless network switch in a wireless network for providing service features for wireless calls without use of a VLR (Visitor Location Register), comprising:

means for communicating with a public data network;

means for communicating with a wireless terminal;

means responsive to a call to or from said wireless terminal for sending a feature service request via said data network to a feature server located in a home network that is connected to or part of said data network; and

said feature service request comprising a query of wireless subscriber service features provisioned on behalf of said wireless terminal and stored by said feature server; and

means for responding to service feature messages from said feature server without VLR storage thereof.

Claim 35 (original): A wireless network switch in accordance with Claim 34 further including means for routing service feature messages, as necessary, between said wireless terminal and said feature server via said data network.

Claim 36 (currently amended): In a wireless terminal adapted for communication in a wireless network, a method for providing service features to said wireless terminal without use of a VLR (Visitor Location Register), comprising the step of:

sending service feature messages to, and receiving service feature messages from, a data network feature server located in a home network that is connected to or part of a public data network, said service feature messages being sent to and received from said feature server via a switch in said wireless network;

said feature service messages pertaining to wireless subscriber service features provisioned on behalf of said wireless terminal and stored by said feature server; and

said feature service messages being processed without VLR storage of feature service information therein.

Claim 37 (original): A method in accordance with Claim 36 further including a step of establishing a data network connection with said feature server.

Claim 38 (original): A method in accordance with Claim 37 wherein said step of establishing a data network connection to said feature server includes performing a look-up of a data network address for said feature server.

Claim 39 (currently amended): A wireless terminal adapted for communication in a wireless network without use of a VLR (Visitor Location Register), comprising:

a radio adapted to communicate over an air interface with a switch associated with said wireless network;

means for sending service feature messages to, and receiving service feature messages from, a data network feature server located in a home network that is connected to or part of a public data network, said service feature messages being sent to and received from said feature server via said switch associated with said wireless network;

said feature service messages pertaining to wireless subscriber service features provisioned on behalf of said wireless terminal and stored by said feature server; and

said feature service messages being processed without VLR storage of feature service information therein.

Claim 40 (original): A wireless terminal in accordance with Claim 39 further including means for establishing a data network connection with said feature server.

Claim 41 (original): A wireless terminal in accordance with Claim 40 wherein said means for establishing a data network connection to said feature server includes means for performing a look-up of a data network address for said feature server.